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 TI tonic drugs for improving body function  
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AB	Tonic drugs for improving body function contain borneol 100-150, camphor 5-10, menthanol 150-200, Santalum album 100, Eugenia caryophyllata 150-200, Agastache rugosa 50-100, and Cnidium monnieri 40-60 wt. parts.				
ST	tonic drug medicinal plant				
IT	Agastache rugosa				
	Clove				
	Sandalwood				
	Selinum monnieri				
	(tonic medicine contg.)				
IT	Pharmaceutical dosage forms				
	(tonic, medicinal plants and borneol and other substances in)				
IT	76-22-2, Camphor	507-70-0, Borneol	30350-73-3, Menthanol		
	RL: BIOL (Biological study)				
	(tonic medicine contg.)				

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HEALTH TONIC FOR RESTORING BODILY FUNCTIONS  
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FOREIGN TITLE	[54A]: HUIFU RENTI JINENG DE BAOJIAN YAOJI

## CLAIMS

1. A health tonic containing the ingredients camphor, menthol, clove, and essential oil, characterized in that it contains an ethanol extract of the following crude drug ingredients in the noted ratios (parts by weight):

sandalwood	100 (crude drug, same below)
clove	150-200
agastache/patchouli	50-100
cnidium seed	40-60
borneol	100-150
menthol	150-200
camphor	5-10
flavoring essence	20-40.

2. A health tonic as defined in Claim 1, wherein said ingredients also include 20-40 parts by weight small molecular weight polyol.

3. A health tonic as defined in Claim 2, wherein said small molecular weight polyol is propanediol.

4. A health tonic as defined in Claim 2, wherein said small molecular weight polyol is propanetriol.

5. A health tonic as defined in Claim 1, wherein said flavoring essence is at least one of essence of [qingxiang-caoxiang], essence of spearmint, essence of vanilla, and essence of cinnamon oil.

6. A health drug as defined in any of Claims 1 through 5, wherein the total content of crude drug in the drug is 250-500 grams per 1000 milliliters ethanol.

## SPECIFICATIONS

### HEALTH TONIC FOR RESTORING BODILY FUNCTIONS

The present invention relates to a health tonic having actions on various bodily functions such as stimulating mind and restoring consciousness, relieving fatigue, and restoring physical strength and energy/vigor.

Long-term mental effort or physical activity, or effects of certain negative stimuli in the external environment can produce different types and extents of fatigue or indisposition, functions of the body such as capability of activity and capability of reaction are reduced, and working efficiency is lowered. At this time, if certain kinds of good stimuli applied to the organism through the sensory organs can, through the cerebral cortex and the nervous system, rapidly relieve fatigue, dispel indisposition, and restore energy/vigor and physical strength, it would be an effective and active method. For example, the positive reactions of music produced by stimulation of the auditory sense not only include the actions of dispelling physical and mental fatigue and rapidly restoring and maintaining bodily functions, but also different types of music can have supplemental and even unanticipated active curative effects on recovery from different diseases, and this is now already recognized by the majority of people and is presently under intense research. The stimuli of different smells through the olfactory sense also can produce different actions and effects on the human emotions and body, furthermore they markedly raise working efficiency, reduce incidences of errors, and improve the quality of work. In addition, the use of drugs also having certain aromatic or volatile

ingredients to stimulate the body or sensory organs also is a simple and effective method used by people to relieve fatigue, invigorate the spirit, restore physical strength and energy/vigor or eliminate indisposition of the body caused by negative external stimuli, but drugs which can be actually used and achieve widespread use are by no means many. For example, "essential balm/medicated oil" which is now already used widely is a method used by rubbing on the superficial skin. Some which contain aromatic volatile ingredients such as menthol, [anyeyou], clove, camphor, and several flavoring essences can be inhaled through the respiratory tract and have certain effects of restoring consciousness, stimulating mind, and straightening out thought, and moreover the lingering time of the fragrances is comparatively long, however the fragrances are comparatively oppressive, and after being inhaled for a long time or being smelled by certain people who are unfamiliar or comparatively sensitive, they often have unpleasant or uncomfortable feelings. At the same time, the stimulation of the nasal mucosa is comparatively strong, and these all are unfavorable factors which have limited their use.

The aim of the present invention is to address the problems described above and to provide a health drug that can have various bodily functions such as stimulating mind and restoring consciousness, relieving all kinds of fatigue, and restoring physical strength and energy/vigor.

The drug of the present invention mainly consists of an ethanol extract of various kinds of natural drugs containing aromatic volatile ingredients. In the composition of each drug, computed according to

crude drug, there are 100 parts (crude drug, same below) sandalwood, 150-200 parts clove, 50-100 parts agastache/patchouli, 40-60 parts cnidium seed, 100-150 parts borneol, 150-200 parts menthol, 5-10 parts camphor, and 20-40 parts flavoring essence. After all the crude drugs are pulverized, they are repeatedly immersed and extracted in ethanol of 70% or higher concentration at room temperature or in reflux state, or extracted using a "Suo-shi" [Chinese rendering of foreign name] extraction apparatus, whereby the ethanol extract is obtained. This is uniformly mixed with the flavoring essence whereby it becomes the usable drug of the present invention. The quantity of ethanol used influences the concentration of the drug and the efficiency of extraction. When the quantity of ethanol used is too little, the concentration of the drug is too great, the fragrance is too rich, it is not easily received by the public, and is a kind of needless waste. At the same time, it is not favorable for the active ingredients to be extracted from the crude drugs to the greatest extent, and it leads to an unnecessary loss of the active ingredients. Through experimentation, the concentration of the drug is preferably 250-450 grams content of crude drugs in 1000 milliliters ethanol. Because the active ingredients are alcohol-soluble volatile oils, it is also unfavorable if the ethanol concentration used is too low.

It can be known from the composition of the drug described above according to the present invention that the main ingredients are the various kinds of crude drugs containing aromatic volatile ingredients. Among these, the ingredients of sandalwood, clove, borneol, menthol, and camphor have the effects of restoring consciousness and straightening

out thought, agastache/patchouli and cnidium seed have the effects of regulating the flow of qi and detoxifying [or, in Chinese traditional medicine, relieving internal heat], and borneol and camphor also have the action of detoxifying [or, relieving internal heat]. These aromatic ingredients dissolve in the ethanol, and with the aid of the action of strong volatilization of the ethanol as well as one or several kinds of commonly used flavoring essences such as essence of [qingxiang-caoxiang], essence of spearmint, essence of vanilla, and essence of cinnamon oil, they very easily act on the body through olfactory stimulation. Therefore this kind of drug mainly can be used by method of inhalation through the olfactory sense, for example it can be directly inhaled through the nose or by applying a small quantity to the outside of the nostrils. In addition to this kind of olfactory method, the drug of the present invention can also stimulate and affect the body by application to other locations or acupuncture points other than the nostrils. In order to reduce all kinds of negative stimulation of ethanol on the skin when applied, a small quantity of polyol such as propanediol or propanetriol, for example, 20-40 parts by weight can be added into the drug.

It can be known from the documentation on all of the drugs used as described above that they are nontoxic. An acute toxicity examination of the drug according to the present invention being constituted as described above was performed. Tests were performed based on the Huoenshi [Chinese rendering of foreign name] method, using 2.15, 4.16, 10, and 21.5 grams/kilogram dosage series on mice. They were fed once orally on an empty stomach with 21.58 milliliters/kilogram body weight. At 27



hours after being subjected to the test, animals began to die in the 21.5 grams/kilogram group, and the total mortality was < 50%. The rest survived 7 days or longer with no abnormalities seen, and vivisections also were normal. Therefore, based on this acute toxic dosage as a grade standard, the drug of the present invention as described above is in the nontoxic range. In addition, stimulation strength tests on oral mucosa and nasal mucosa were performed using the drug of the present invention as described above with Japanese large-eared white rabbits as experimental animals. In three tests of edema, hyperemia, and salivation and nasal discharge, all were comparable with results of the control group with physiological saline, which also demonstrates that it has no stimulating effect on the mucous membranes. The results are shown in Table 1.

*human patients* Therapeutic tests were performed using the drug of the present invention as described above on 30 cases of bodily indisposition such as dizziness, headache, lassitude, and nasal obstruction brought about by arid and hot climate, or air sickness from flying long distances, or intense and stressful physical or mental activity. The drug of the present invention as described above was applied onto the temple, forehead or both cheeks and in front of the nostrils, after which by subjective feeling, there were 11 cases of those having invigoration of the spirit, 8 cases of those having headache disappear, 9 cases of those having dizziness disappear, and 2 cases of those having alleviated nasal obstruction. The results of comparative tests of using the drug of the present invention to restore and raise bodily functions by inhalation method are shown in Table 2. It is not difficult to see from Table 2

human patient  
that the results of double statistical processing all reveal that after using the drug of the present invention, there are marked differences with the control group in the increase of bodily reaction time, mental strength such as excitability, and physical strength. Of these results, when a test of strength of neurological activity was performed using anfeimofu [Chinese rendering of foreign word] correction table, the number of characters read in the same unit time was raised 20%; the reaction sensitivity of vision to light in a flash fusion test was raised 79.5%; the speed of response of hearing to sound in an auditory response time test was raised 16.5%; in a strength increase experiment, with males using a 7.6 kilogram lead ball and females using a 3 kilogram lead ball and taking the results of 33 measurements separately for 9 people, the average results were raised 3.7%.

All of the tests described above demonstrate that the drug of the present invention has marked effects in aspects such as stimulating mind and restoring consciousness, relieving fatigue, restoring energy/vigor and physical strength, and raising efficiency and capability of work. In addition, compared with "essential balm/medicated oil," it has the advantages of light and natural fragrance and little stimulation, and it is easily accepted by the public. Therefore, the drug of the present invention has extremely great value as an effective health drug in dispelling bodily indisposition, increasing physical strength and mental activity to respond to stress, and increasing working ability.

The introduction below serves as working examples of the drug of the present invention as described above, but the main principle of the present invention is by no means limited to these working examples.

See Table 3 for the composition of each example. The preparation method is as follows. After pulverizing each crude drug material, repeatedly extract under reflux using a Suo-shi [Chinese rendering of foreign name] extraction apparatus, and stop the extraction operation when the extract solution becomes basically colorless. Based on the ethanol content of the product, concentrate and recover or appropriately add a small quantity of ethanol to adjust to the required concentration range, then add flavoring essence and small molecular polyol, and mix uniformly. Products biased toward certain fragrance types can be obtained by changing the quantities of several major crude drugs in each example, such as, when biased greatly toward borneol and menthol, the cool and refreshing feeling is comparatively strong; when the quantity of camphor is added heavily, the feeling of lightness to the olfactory sense is weak, and the fragrance is comparatively oppressive, but when the quantity used is comparatively little, the feeling of lightness is strong, but the feeling of penetration of the drug is a little lighter.

TABLE 1

		6 Hours			24 Hours			7 Days		
		Edema	Hyperemia	Salivation and Nasal Discharge	Edema	Hyperemia	Salivation and Nasal Discharge	Edema	Hyperemia	Salivation and Nasal Discharge
Control Group (Physiological Saline)	6	0.1ml	-	-	-	-	-	-	-	-
Oral Mucosa Group	6	0.1ml	-	-	-	-	-	-	-	-
Nasal Mucosa Group	6	1 drop	-	-	-	-	-	-	-	-

Note: + is positive, - is negative

TABLE 2

Experimental Item	Number of Cases Per Group	Numeric Unit	Average Value of Control Group	Average Value of Experimental Group	Statistical Processing
Strength of Neurological Activity (Anfeimofu [Chinese rendering of foreign word] Correction Table)	44	Characters/5 Minutes	941.4091	1169.9773	P(2) < 0.001
Flash Fusion	42	Cycles/Second	18.3357	22.4119	P(2) < 0.001
Auditory Response Time	46	Seconds	0.2824	0.2208	P(2) < 0.01
Strength Increase Experiment (Results of Pushing Lead Ball)	9	Meters	8.9336	9.4724	P(2) < 0.05

TABLE 3

(Parts By Weight)	Example 1	Example 2	Example 3	Example 4	Example 5
Sandalwood	100	100	100	100	100
Clove	180	200	170	180	200
Agastache/Patchouli	90	100	80	70	60
Cnidium Seed	60	60	50	40	40
Borneol	100	130	140	130	120
Menthol	190	200	170	160	150
Camphor	5	10	8	5	10
Flavoring Essence	40	20	40	30	40
Propanediol	20	40			
Propanetriol			30	40	20
Ethanol Content (ml)	1000	1000	1000	1000	100